CLAIMS

What is claimed is:

1. An intake valve for a combustion engine having an oil reservoir and adapted for combusting fuel, the intake valve comprising:

a valve stem; and

a valve guide arranged proximate the valve stem, the valve guide and valve stem defining a first clearance dimension and a second clearance dimension between an inner surface of the valve guide and an outer surface of the valve stem, the second clearance dimension being greater than the first clearance dimension;

wherein the second clearance dimension is sized to accept a volume of oil quantified to dissolve high boiling fraction from the fuel to lessen the accumulation of high boiling fraction between the valve stem and the valve guide.

2. The intake valve of Claim 1, further comprising a channel having a depth defined by the first and second clearance dimensions, the channel sized to accept the volume of oil and disposed in fluid communication with the oil reservoir.

3. The intake valve of Claim 2, wherein the channel comprises a plurality of channels extending at least a portion of the length of the valve guide.

4. The intake valve of Claim 2, wherein the channel comprises a spiral extending from a point proximate a first end to a point proximate a second end of the valve guide.

5. The intake valve of Claim 2, wherein the channel comprises a ring-like shape disposed proximate the second end of the valve guide.

6. The intake valve of Claim 1, further comprising:

a third clearance dimension between the inner surface of the valve guide and the outer surface of the valve stem, the third clearance dimension being greater than the first clearance dimension;

a first channel defined by the first and third clearance dimensions, the first channel arranged in fluid communication with the oil reservoir at a first end of the valve guide;

a second channel defined by the first and second clearance dimensions, the second channel comprising a ring-like shape sized to accept the volume of oil and disposed proximate the second end of the valve guide and arranged in fluid communication with the first channel;

wherein oil from the oil reservoir is permitted to travel to the second channel via the first channel thereby providing a volume of oil at the second channel quantified to dissolve the high boiling fraction from the fuel.

7. The intake valve of Claim 1, wherein the second clearance dimension is about five times the size of the first clearance dimension.

8. A valve guide for an intake valve of a combustion engine, the valve guide comprising:

a surface for guiding a valve stem, the surface having a first end and a second end defining a length; and

a first channel formed in the surface for receiving oil from an oil reservoir;

wherein the first channel is sized to receive a volume of oil quantified to dissolve high boiling fraction from fuel to lessen the accumulation of high boiling fraction between the valve stem and the surface for guiding the valve stem.

9. The valve guide of Claim 8, wherein the first channel comprises a plurality of longitudinal channels extending at least a portion of the length of the surface.

10. The valve guide of Claim 8, wherein the first channel comprises a spiral having a starting point proximate the first end and an ending point proximate the second end.

11. The valve guide of Claim 8, wherein the first channel is disposed proximate the second end of the surface, and further comprising:

a second channel formed in the surface and disposed between the first end and the first channel, thereby providing a fluid path from the first end, through the second channel, to the first channel.

12. The valve guide of Claim 11, wherein the first channel comprises a ring-like shape.

13. A method for dissolving or diluting high boiling fraction from fuel at an intake valve stem of a combustion engine, comprising:

passing a volume of oil from a first end of a valve guide toward a second end thereof through a first channel disposed between the valve stem and the valve guide; and

receiving the volume of oil at a second channel disposed at the second end of the valve guide, the volume of oil quantified to dissolve high boiling fraction from fuel to lessen the accumulation of high boiling fraction between the valve stem and the valve guide.

14. The method of Claim 13, wherein the passing a volume of oil further comprises:

passing a volume of oil in a volume ratio of oil to high boiling fraction that is equal to or less than about 8-to-1.

15. The method of Claim 14, wherein the passing a volume of oil further comprises:

passing a volume of oil in a volume ratio of oil to high boiling fraction that is equal to or less than about 3-to-1.